

## PATENT ABSTRACTS OF JAPAN

(11) Publication number : 10-060483  
 (43) Date of publication of application : 03.03.1998

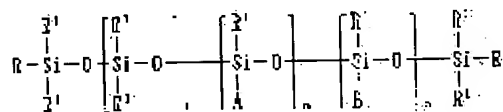
(51) Int. Cl. C11D 3/60  
 // C11D 3/60  
 C11D 3/37  
 C11D 3/30  
 C11D 3/34  
 C11D 3/20  
 C11D 3/32  
 C11D 3/33 )

(21) Application number : 08-219967 (71) Applicant : KAO CORP  
 (22) Date of filing : 21.08.1996 (72) Inventor : YAMADA ISAO  
 SHIGEMATSU KUNIYOSHI  
 TERANISHI FUTOSHI

## (54) DETERGENT COMPOSITION

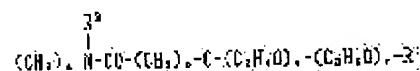
## (57) Abstract:

PROBLEM TO BE SOLVED: To obtain a detergent composition capable of suppressing the shrinkage due to felt shrinkage or relaxation shrinkage when washing a wool product by applying a weak mechanical force thereto by blending a specific amino-modified silicone derivative, etc., therein.

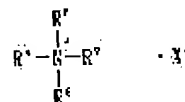


I

SOLUTION: This detergent composition comprises (A) an amino-modified silicone derivative represented by formula I [(l) is 100-600; (m) and (n) are each a number so as to provide (l):(m)=(100:1) to (10:1) and (m):(n)=(1:10) to (10:1); R is a 1-4C alkyl, hydroxy or an alkoxy; R<sup>1</sup> is a 1-4C alkyl; A is represented by formula II [(a) and (b) are each 2-6; (p) is 1-6; (q) and (x) are each 1-20; (r) and (y) are each 0-20; R<sup>2</sup> is H or a 1-4C alkyl; R<sup>3</sup> is a 1-18C alkyl; B is (CH<sub>2</sub>)<sub>a</sub>-O-(C<sub>2</sub>H<sub>4</sub>)<sub>x</sub>-(C<sub>3</sub>H<sub>6</sub>O)<sub>y</sub>-R<sup>1'</sup> [(x) is 1-20; (y) is 0-20; R<sup>1'</sup> is a 1-10C alkyl] or R<sup>1</sup>], (B) one or more of an anionic surfactant, a nonionic surfactant, an amphoteric surfactant and a zwitter ionic surfactant and (C) a compound represented by formula III (R<sup>4</sup> and R<sup>5</sup> are each a 12-22C alkyl or an alkenyl; R<sup>6</sup> and R<sup>7</sup> are each methyl, ethyl, hydroxyalkyl, etc.).



II



III

## LEGAL STATUS

[Date of request for examination]

07.02.1997

[Date of sending the examiner's decision  
of rejection]

[Kind of final disposal of application  
other than the examiner's decision of  
rejection or application converted  
registration]

[Date of final disposal for application]

[Patent number] 2926006

[Date of registration] 07. 05. 1999

[Number of appeal against examiner's  
decision of rejection]

[Date of requesting appeal against  
examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998, 2003 Japan Patent Office